

ZEROBEAT

Hampden County Radio Association

Our 50th ARRL Affiliated Year

Issue 1

September 1996

Next HCRA Meeting

The September HCRA meeting welcomes one of our own, Fred Stefanik, N1DPM. Fred will present an introduction to VHF/UHF weak signals.

Work the repeater every night and wonder what more there is to life on the VHF/UHF bands? This is the meeting to go to. Fred will outline how to put together a modest station for SSB/CW contesting and DX. He will also show the station of at least one very famous club member.

FLASH! HCRA HAS A NEW PRESIDENT!

Bob McCormick, WF1R has agreed to take the president's slot and Barry, N1IJK has will stay on as a board member. Many of you old timers may remember Bob from decades past. He was very active on the board and president of the club for a few years. Unfortunately, employment took him out of the area for a good many years. In fact he was in the Netherlands operating as PA3GCQ while working as a consultant for the STER, part of the Dutch broadcasting organization.

Bob is now back in the area heading up a small consulting company.

At the next meeting please come up and say hello to Bob as an old friend or a new acquaintance.

1996/1997 Slate of Officers

President : Bob McCormick, WF1R
Vice President: Frank Potts, NC1I
Treasurer: Greg Stoddard, N1AEH
Secretary: Jim Sebolt, N1DUY

Board of Directors:

For one year
 (appointed to finish the 2nd yr of a 2 yr term)

Dan McKay, N1RAL
 Don Lynch, KA1YZV
 Fred Stefanik, N1DPM
 Shawn McCormick, NC1B

For two year terms: (elected in June)

Jeff Hugabone, N1KBY
 Barry Mason, N1IJK
 John Balboni, AC1T
 Stan Hillinski, KA1ZE

Vox Pop

(Dedicated to newsworthy items hopefully without insulting anyone.)

Yorke, K1BXE will be handling the Peach Festival communications this year (Isn't that just Peachy!!)***** Frank, NC1I worked an EA6 on moon bounce. Word has it that Frank's antenna radiates so much power its moved the moon slightly further from the earth! ***** John, AC1T is so organized - his desktop PC plugs into his laptop which plugs into his pocket organizer which

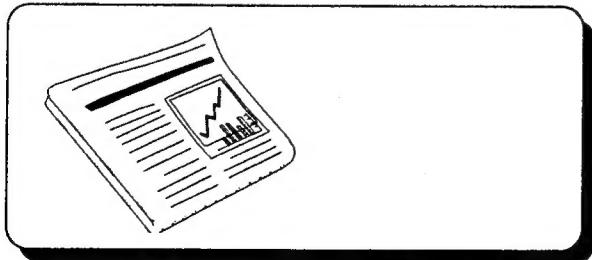
plugs into his watch. What's next - a plug directly into the brain?!! (John is that a din, RCA or phono plug.....?) ***** Greg, N1AEH has been doing so much CW (he's the manager of the CT CW nets) he is starting to talk in dots and dashes, right Greg? ans - dit-dah-dit, dit-dah-dit. ***** Fred, N1DPM had some unwanted guest ops..... an family of racoons (all licensed, of course) were heard operating the VHF contest with 1 kw on 6 meters from N1DPM's QTH. The cops were called due to the TVI in the neighborhood. *****

Editor's Message.....

Guess what!!!! It looks like I'm out of a job! Now that Barry, N1IJK will not be doing the day to day running of the club, he has volunteered to be Zerobeat editor!!!!!! Way to go Barry!!!!

Does that mean you won't be hearing from me - - not a chance! I said I would handle the "Vox Pop" column and will be writing letters to the editor. Soooooo, if you have any juicy gossip (err..factual news) that you would like to see printed, send it to me or call me. The soapbox stuff (letters to the editor), that will be my own opinion.

Steve Nelson WA1EYF
1 Marilyn Drive
Wilbraham, MA 01095
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DXing Today.....

Still no word from those avid DXers out there. Perhaps no one is working the low bands any more! I know for a fact that 10 meters was open back in June when the VHF bands opened up.

Let's hear from you 10-10 members out there.....How's DX!

How about some help... Would you like to write something for this column?

Don't Forget.....

HCRA Meeting.....Friday, September 6, 7:30

MTARA Meeting..... Friday September 20

ARRL Convention, Oct 4, 5, & 6

VHF/UHF Newsnotes

DX Abounds!!!!!!

6 meters and to some extent 2 meters have been opening up during the summer. At the end of June I noticed the FM radio station I usually listen to in the car was getting some interference (WSRS 96.1 Mhz out in Worcester) Unfortunately I did not have a chance to check it out, but there were some openings to the south and midwest. After a reminder tip from Fred, N1DPM, I tried 6 meters during the first few weeks of July. With only 10 watts I was able to work into the mid-west and south. Below is a list of grid squares and locations I worked.

Interested in the above? Come to the September meeting and learn all about VHF and UHF weak signal work. It's not as hard or expensive to get started as you might think. Also you may see the antenna farm and station of some famous HCRA members!

PC Bits & Bytes

About a year ago I heard my nephew talk about a "direct internet provider" and a hadn't a clue what he was talking about! Well, through the magic of computers (and my son and daughter) I now use one of those, well, sort of.

A direct internet provider allows users to connect directly to the internet without going through an online service provider such as America On Line, Compuserve and Prodigy.

If you like all the organized information when you sign on, then a direct connection isn't for you. But if you surf the net (hey, I got the language down!) a lot, you may want to look at this mode of connection.

More about this topic later from WF1R.

Steve WA1EYF
596-8216

FOR SALE OR SWAP

Nothing this again this month! Boy, you guys (and gals) must be pretty satisfied with your equipment! Contact Steve WA1EYF (596-8216) with your sale or swap items!

Would you like.....

to write a column for Zerobeat. Let me interview you on the phone instead of having you sit down and write it!

to volunteer to help at one event! See Barry, N1IJK at the next meeting.

Any Zerobeat original article may be reprinted as long as credit is given to this publication and the author. 73 73 73 73 73 73 73 73 73 73 73 73

HCRA '96-'97 Meeting Schedule

September 6, 1996
Introduction to Weak Signals - Fred N1DPM

October 4, 1996
Jade Antennas

November 1, 1996
Annual HCRA Auction

December 6, 1996
Holiday Social

Club meetings are held at the Feeding Hill Congregational Church on Rt 187 at 7:30 on the first Friday of every month except July and August or as noted. Board meetings are held monthly and are open to all current HCRA members. See Bob, WF1R for details.

Be Prepared.....

With hurricane season just about in full swing, we all should check the condition of our batteries for emergency equipment and flashlights. Although hurricanes rarely come up this way, there's always one that does every few years.

Contact your local Civil Defense, Emergency Management Department or local fire and police and let them know you are available with emergency communications.

You never know.....

Editorial

(This editorial is strictly the opinion of the editor and does not necessarily represent the opinions or view of the HCRA officers, directors or members.)

Recently, many of you read in QST about the election of Bill Veodisch, W1UD to ARRL Section Manager, Western Mass. Bill (from the Fitchburg/Leominster area) has returned to this post he held a few years ago and I would like to offer my congratulations on his victory.

Unfortunately Bill and his successor, also from the same Western Mass area, have started a disappointing trend. I've noted that over the past few years most of the news from our section deals with happenings in the Fitchburg/Leominster area and not a cross-section of the whole area. It's almost as though the rest of Western Mass doesn't exist.

You must realize that much of this could be our fault. If we don't provide Bill or any other SM with news, they certainly can't write about it. (I know all about that from doing this editor's job.)

In that light, the HCRA will make sure a copy of Zerobeat is sent to Bill every month. I think all clubs in the section should do the same. In return we ask that Bill assure that news from all over the section is presented in an equal fashion.

Steve, WA1EYF

VE Session

On Thursday, June 13, Yorke, K1BXE ran a VE session at Minnechaug Regional High School in Wilbraham. This session was primarily to test students at the high school.

Participating were Yorke, K1BXE, Bill, NJ1E, Larry, N1BDH and Pat, N1CET. Two new Technician Plus, two new Technicians and one Element 2 passed came from the session.

Emergency Communications & Disaster Preparation Presentation

On June 10th HCRA members and members of the Southwick Emergency Management Agency and RACES/ARES did a presentation for Southwick Girl Scout Troop 257 as part of their Communications Badge requirements.

HCRA members Keith Strogmgren, N1MOC, Pauline Dunlap N1EVE and Charles Dunlap, K1II along with other Southwick RACES and ARES operators used portable radio equipment in five separate locations and effectively demonstrated how the Amateur Radio Emergency Service would be used in time of need for emergency communications. A demonstration of the Southwick Emergency Management Communications Command vehicle and family emergency/disaster preparation was also included during the session.

(Thanks to Charlie, K1II for the news bite!)

Bike Mobile!!??

Did you know there is a newsletter that is dedicated to Bicycle mobile hams!? Published by the Bicycle Mobile Hams of America (BHMA), this quarterly newsletter tell all about operating and HT, low band rig or almost any other ham radio while riding a bicycle. Apparently a "Stray" in QST started the whole thing in 1989.

If you are interested in subscribing, contact them at: BMHA, Box 4009, Boulder, CO 80306-4009 or call 303-494-6559.

PRODUCT REVIEW

TELETEC SOLID STATE VHF & UHF AMPLIFIERS

by: Fred Stefanik N1DPM

I was recently given the opportunity to try out and comment on a series of solid state amplifiers produced by a company called TELETEC. Steve Kostro at Down East Microwave Inc. asked me to look them over and dig into them as he was not concerned about voiding the warranty on these test units and he wanted some assurance that these were worth carrying to supplement his transverter products. So here we go...

First of all, all of these amplifiers are built in the same housing which is in fact a casting rather than the conventional extruded heatsink. This construction has allowed them to do a couple of very nice things such as allow for a tight fitting bottom cover for good RF shielding, and provide a "thicker" cross section of material directly under the RF power devices that will increase the thermal mass allowing for a more even temperature distribution.

The printed circuit boards are very professional in appearance and at 432 MHz the went to the expense of using woven glass Teflon type of circuit board. The boards are evidence of a careful design and layout as there are no "hack and slash" marks or jumpers used and these were revision A boards.

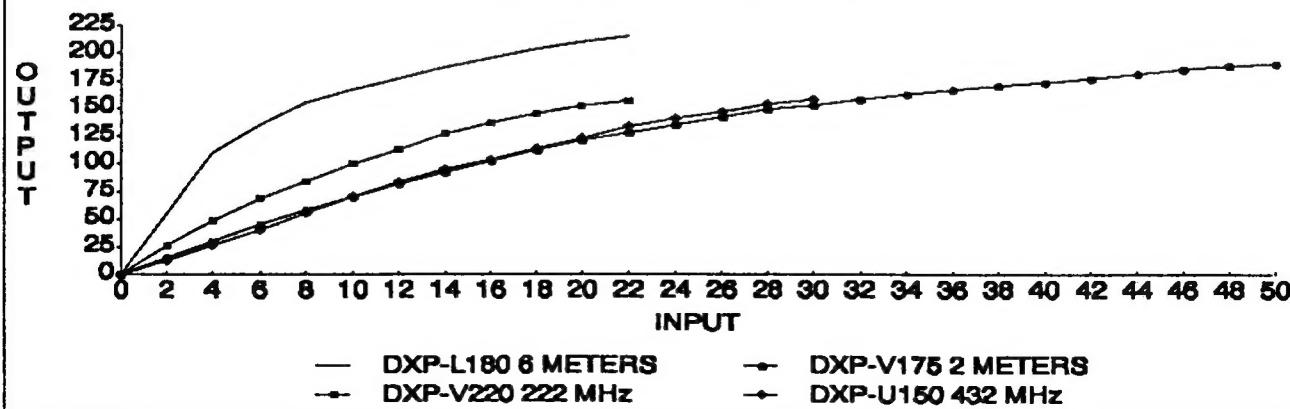
The amplifiers all are based around a 2 transistors in parallel design. This is a good design practice as more stages would allow too much gain and cause the amplifiers to be overdriven easily. This would make for some more lousy signals on the bands. TELETEC deserves a great big "ATTABOY!!" as the ONLY solid state amplifier company to employ a low impedance active regulated bias circuit that can supply all of the necessary base current required by these modern high power bipolar RF devices without collapsing!!! This as you can see from the chart of input power versus output power below, makes these amplifiers LINEAR. It's about time!! Also the DC and control connections were properly bypassed just before they exited the enclosure. The RF sensed keying works quite well and has adjustable delay for SSB operation.

The 4 amplifiers that were tested were the DXP-L180, 6 meters, DXP-V175, 2 meters, DXP-V220, 135cm, and the DXP-U150, 70cm. All of the amplifiers easily met and exceeded their output power specifications. The measurements I made were with a pair of BIRD 43 wattmeters, one on the input and the other directly on the output.

With the good, comes the bad, and because this like any product will have some shortcomings here are the ones I found. The RF device part numbers were double obliterated. Isopropyl alcohol removed the top layer of black "paint" but below this was a tougher substance that did not allow the device number to be read. I am assuming these to be "proprietary" RF devices but there is no real way of knowing for sure and with a 18 month warranty, who really cares. The connections for hard keying and preamplifier disable, are miniature banana type jacks and the mating connectors are available for an extra \$5.00. These should have been included. Last but not least, the preamps. As I stated above they are always on, and bust be disabled through the use of one of the rear panel jacks. This may not seem like too much of a problem, but these are JFET designs that are specked at 8 dB gain minimum and easily met as the 6 meter one was 15dB and the 70cm one was 10.5dB, with the others in between. The real key is that why use a JFET in 1996 when a good GaAs FET device costs less than \$5.00!! The noise figure that is not specked measured anywhere from 1.3 to 3 dB. A GaAs FET would come in at less than 1 dB typical. Oh well you can't have everything.

Overall these are quite nice solid state amplifiers and are certainly linear and well behaved. The workmanship is top notch and they're priced competitively. All on the air test reports were excellent and comments on how "clean" the signal sounded were unsolicited.

TELETEC AMPLIFIERS
P in - vs - P out 5-2-96 N1DPM



September Meeting

Introduction to Weak Signal

VHF/UHF

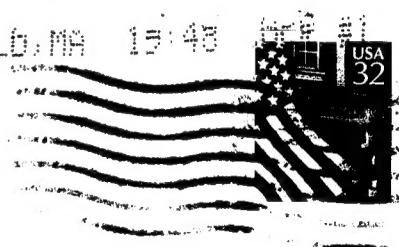
September 6, 1996, 7:30 pm, Feeding Hills Congregational Church

Presented by Fred N1DPM

Editor: Steve Nelson, WA1EYF

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